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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Col	mplete if Known	
Application Number	10/759,904	
Filing Date	JANUARY 16, 2004	
First Named Inventor	ERIC J. BECKMAN	
Art Unit	1618	
Examiner Name	JAMES WILLIAM ROGERS	
Attorney Docket Number	02-012	

			U. S. PATEN	DOCUMENTS		
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	A1	US- 4,689,386	11-07-1985	CHAPMAN		
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		FOREIG	N PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
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		_	CLOSURE	Filing Date	JANUARY 16, 2004
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	(000 00)			Examiner Name	JAMES WILLIAM ROGERS
Sheet	2	of	6	Attorney Docket Number	02-012

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CS1	ZHANG, J.Y. et al. A new peptide-based urethane polymer: synthesis, biodegradation, and potential to support cell growth in vitro. Biomaterials, (2000), 21, 1247-1258.	
	CS2	BECKWITH, A.C. et al.; Direct estimation of lysine in corn meals by the ninhydrin color reaction. J. Agric. Food Chem. (1975), 23, No. 2, 194-196.	
	CS3	CHRISTMORE, D., et al.; Improved recovery and stability of ethanol in automated headspace analysis. J. Forensi Sci. (1984), 29, 1038-1044	
	CS4	HELLMÈR, J., et al. Automatic luminometeric kinetic assay of glycerol for lipolysis studies. Anal. Biochem. (1989), 177, 132-137.	
	CS5	GRUDPAN, K., et al.; Flow injection spectrophotometric or conductometric determination of ascorbic acid in a vitamin C tablet using permanganate or ammonia. Talanta, (1999), 49, 1023-1026.	
	CS6	BRUDER, S.P., et al.; Growth kinetics, self-renewal and the osteogenic potential of purified human mesenchymal stem cells during extensive subcultivation and following cryopreservation. J.Cell Biochem. (1997), 64, 278-294.	
	CS7	ANDREONI, G., et al.; Densitometric quantification of neuronal viability by computerized image analysis. Exp. Neurol., (1997),148, 281-287.	
	CS8	ISHAUG, S.L., et al.; Bone formation by three-dimensional stromal osteoblast culture in biodegradable polymer scaffolds. J. Biomed. Mater. Res., (1997), 36, 17-28.	
	CS9	SPAANS, C. J. et al.; A new biomedical polyurethane with a high modulus based on 1,4-butanediisocyanate and epsilon-caprolactone. Journal of Materials Science: Materials in Medicine; (1998); 9, 675-678	
	CS10	WANG, S. et al.; Role of glomerular ultrafiltration of growth factors in progressive intertitial fibrosis in diabetic nephropathy. Kindney International, (2000); 57, 1002-1014.	

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				Examiner Name	JAMES WILLIAM ROGERS
Sheet	3	of	6	Attorney Docket Number	02-012

Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Initials*	No.1	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CS11	ZHENG, F. et al.; Upregulation of type I collagen by TGF-Beta in mesangial cells is blocked by PPAR gamma activation. Am. J. Physiol. Renal. Physiol.; (2002); 282, F639-F648.	
7	CS12	DERYNCK, R. et al.; The murine transforming growth factor-beta precursor. J. Biol. Chem.; (1986); 261; 4377-4379.	
	CS13	LAEMMLI, U.K. Cleavage of structural proteins during the assembly of the head of bacteriophage T4. Nature; (1970); 227; 680-685.	
	CS14	ZHANG, J. et al.; Effect of cystathionine and cystathionine metabolites on the phosphorylation of tyrosine residues in human neutrophils. Biochem. Biophys. Res. Commun.;(1996); 224; 849-854.	
	CS15	ZHENG, W.; ZHAO, Q. Establishment and characterization of an immortalized Z310 choroidal epithelial cell line from murine choroid plexus. Brain Res (2002); 958(2); 371-380	
	CS16	NAKAYAMA, Y. et al.;Development of high-performance stent: gelatinous photogel-coated stent that permits drug delivery and gene transfer. J Biomed Mater Res (2001); 57(4): 559-566.	
	CS17	KIM, B.S., MOONEY, D.J. Development of biocompatible synthetic extra cellular matrices for tissue engineering. Trends Biotechnol. (1998),16, 224-230.	
	CS18	SHINOKA, T.; et al.; Tissue engineering heart valves: valve leaflet replacement study in a lamb model. Ann. Thorac. Surg. (1995), 60, S513-S516.	
	CS19	FRANCESCHI, R. et al.; Effects of ascorbic acid on collagen matrix formation and osteoblast differentiation in murine MC3T3-E1 cells. J. Bone Miner. Res. (1994), 9, 843-854.	
		MIZUTANI, A. et al.; Expression of matrix metalloproteinases during ascorbate-induced differentiation of osteoblastic MC3T3-E1 cells. J. Bone Miner. Res. ( 2001), 16, 2043-2049.	

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Signature	Considered	

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	1000 as many one			Examiner Name	JAMES WILLIAM ROGERS
Sheet	4	of	6	Attorney Docket Number	02-012

		NON PATENT LITERATURE DOCUMENTS	
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	CS21	SPAANS, C. J. et al.; High molecular weight polyurethanes and a polyurethane urea based on 1,4-butanediisocyanate. Polymer Bulletin, (1998), 41, 131-138	
	CS22	SPAANS, C. J. et al.; New biodegradable polyurethane-ureas, polyurethane and polyurethane-amide for in-vivo tissue engineering: structure-properties relationships. Polymeric Materials Science and Engineering, (2001), 85, 61-62	
	CS23	FROMSTEIN, J. D. et al.; Elastomeric biodegradable polyurethane blends for soft tissue applications. Journal of Biomaterials Science Polymer Edition, (2002) 13, 391-406.	
	CS24	SKARJA, G. A.; WOODHOUSE, K. A.; Synthesis and characterization of degradable polyurethane elastomers containing an amino-acid based chain extender. Journal of Biomaterials Science Polymer Edition, (1998), 9, 271 295.	
	CS25	SAAD, B. et al.; Development of degradable polyesterurethanes for medical applications: In vitro and in vivo evaluations. Journal of Biomedical Materials Research, (1997), 36, 65-74	
	CS26	BORKENHAGEN, M. et al.; In vivo performance of a new biodegradable polyester urethane system used a nerve guidance channel. Biomaterials, (1998), 19, 2155-2165.	
	CS27	KYLMA, J.; SEPPALA, J. V. Synthesis and characterization of a biodegradable thermoplastic poly(ester-urethane) elastomer. Macromolecules, (1997), 30, 2876-2882.	
1	CS28	GORNA, K. GOGOLEWSKI, S. Biodegradable polyurethanes for implants. II. In vitro degradation and calcification of materials from poly(epsilon-caprolactone)-poly(ethylene oxide) diols and various chain extenders. Journal of Biomedical Materials Research, (2002), 60, 592-606.	
	CS29	VROUWENVELDER, W. C. A. et al.; Histological and biochemical evaluation of osteoblast culture on bioactive glass, hydroxyapatite, titanium alloy, and stainless steel. J. Biomed. Mater. Res., (1993), 27, 465-475, .	
	CS30	REMES, A.; WILLIAMS, D.F. Immune response in biocompatibility, Biomaterials, (1992), 13:11, 731-743.	

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Cuboman				Application Number	10/759,904	
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STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	ERIC J. BECKMAN	
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Sheet	5	of	6	Attorney Docket Number	02-012	

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	CS31	CHOONG, P. F. M. et al.; Effects of ascorbic acid, calcitrol, and retinoic acid on the differentiation of preosteoblasts. J. Orthop. Res., (1993), 11, 638-647, .	
	CS32	PRASHER, D. C. et al.; Primary structure of the aequorea Victoria green-fluorescent protein. Gene, (1992), 111, 229-233, .	
	CS33	HEIM, R. et al.; Wavelength mutations and posttranslational autoxidation of green fluorescent protein. Proc. Natl. Acad. Sci. USA, (1994), 91, 12501-12504.	
	CS34	CHALFIE, M. et al.; Green fluorescent protein as a marker for gene expression. Science, (1994), 263, 802-805.	
	CS35	OKABE, M. et al.; 'Green mice' as a source of ubiquitous green cells. FEBS Lett., (1997), 407, 313-319.	
	CS36	IKAWA, M. et al.; A rapid and non-invasive selection of transgenic embryos before implantation using green fluorescent protein (GFP). FEBS Lett., (1995), 375, 125-128.	
	CS37	KIM, S. et al.; Pore structure analysis of swollen dextran-methacrylate hydrogels by SEM and mercury intrusion porosimetry. J. Biomed. Mater. Res., (2000.), 53, 258-266.	
	CS38	SHEEHAN, D.;HRAPCHAK, B. Theory and practice of histotechnology. 2nd Ed. Battelle Press, Ohio, (1980), pp 226-227.	
	CS39	REINERT, H. et al.; In situ measurement of collagen synthesis by human bone cells with a Sirius Red-based colorimetric microassay: effects of transforming growth factor BETA2 and ascorbic acid 2-phosphate. Histochem. Cell Biol., (1999), 11, 271-276, .	
	CS40	ZHANG, J. et al.; Synthesis, biodegradability, and biocompatibility of Lysine diisocyanate-glucose polymers. Tissue Engineering, (2002), 8, No. 5, 771-785.	

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3	CS41	ZHANG, Z. et al.; Morphological, physical and chemical evaluation of the Vascugraft arterial prosthesis: comparison of a novel polyurethane device and other microporous structures. Biomaterials, (1994), 15, No. 7, 483-501.		
	CS42	ATHANASIOU, K. A. et al.; Sterilization, toxicity, biocompatibility and clinical application of polylactic acid/polyglycolic acid co-polymer. Biomaterials, (1996), 17, 93-102.		
	CS43	PENCO, M. et al.; Degradation behaviour of block copolymers containing poly(lactic-glycolic acid) and poly(ethylene glycol) segments. Biomaterials, (1996), 17, 1583-1590.		
	CS44	RAMANATHAN, R. et al.; Alcohol inhibits cell-cell adhesion mediated by human L1. J. Cell Biol., (1996), 133, 381-390, .		
	CS45	FARLEY, J. R. et al.; Direct effects of ethanol on bone resorption and formation in vitro. Arch. Biochem. Biophys., (1985), 238, 305-314.		
	CS46	BRUIN, P. et al.; Design and synthesis of biodegradable poly(ester urethane) elastomer networks composed of non toxic building blocks. Makromol. Chem., (1988), 9, 589-594.		

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